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# **SPECIFICATION**

**DESCRIPTIVE TITLE OF THE INVENTION.**

**SOLAR POWERED (PHOTOVOLTAIC) ELECTRO LUMINESCENT EXTRUDED LIGHTING DEVICE.**

• **CROSS REFERENCE TO RELATED APPLICATIONS.**

**A PROVISIONAL APPLICATION FOR PATENT OF THE SAME DEVICE WAS SUBMITTED AND GIVEN THE FOLLOWING APPLICATION NUMBER 60/433,274**

**FILING DATE: 12-16-02.**

**CONFIRMATION NUMBER: 8507**

**CUSTOMER NUMBER: 30176**

• **STATEMENT REGARDING FED SPONSORED R&D: NONE**

• **SEQUENCE LISTING: NONE**

## **BACKGROUND OF INVENTION:**

**THIS INVENTION IS CONCERNED WITH THE DOUBLE CONVERSION OF LIGHT OR PHOTONS INTO ELECTRICITY, STORAGE OF IT AND THE CONVERTING OF ELECTRICITY BACK INTO PHOTONS.**

**WHILE THE DESCRIBED CONVERSION WAS TECHNICALLY PREVIOUSLY POSSIBLE, THIS INVENTION RELATES TO ACHIEVING SAID CONVERSION USING A DOUBLE SURFACED, (UPPER AND LOWER) COMBINATION OF TECHNOLOGIES, SAID TECHNOLOGIES ARE ARRANGED IN AN EXTRUDED, LAMINATED AND/OR LINEARLY PRODUCED COMPONENTS, TO ILLUMINATE SIGNS OR ANY GRAPHICALLY REPRODUCED INFORMATION BOARD.**

# **SUMMARY OF INVENTION**

## **SOLAR POWERED (PHOTOVOLTAIC) - ELECTRO LUMINESCENT EXTRUDED DEVICE.**

THE PRESENT INVENTION APPLICATION IS TO PROVIDE GRID-LESS-POWERED ILLUMINATION BY COMBINING THE RESULTS OF THREE PHYSICAL MATERIAL EFFECTS:

- PHOTO-VOLTAIC MATERIALS,
- ELECTRO-LUMINESCENT MATERIALS  
AND
- FORMED-BY-EXTRUSION MATERIALS.

THE EXTRUDED CARRIER OF THE BODY OF THE FIXTURE COULD BE EITHER MADE OF ALUMINUM OR PLASTIC ON A TECHNICALLY SIMILAR PROCESS (EXTRUSION) HOWEVER, THIS INVENTION IN SOME OF ITS APPLICATIONS, USES THE TRANSPARENCY OF THE PLASTIC (POLYCARBONATE OR SIMILAR) TO CONCEAL A COMBINATION OF PHOTOVOLTAIC AND ELECTROLUMINESCENT "TAPE" OR LINEAR MATERIAL UNDER ITS EXTRUDED SHAPE AND THEREFORE, IT PROVIDES WITH A WEATHER-PROOF PERFORMANCE OF THE DEVICE.

THE CONVERSION OF SOLAR LIGHT INTO "NIGHT" LIGHT IS CONTROLLED BY AN ELECTRONIC COMPONENTS CONTAINING:

- PHOTO CELL OR LIGHT MEASURING DEVICES,
- BATTERIES OR "ENERGY STORAGE UNITS"  
AND
- A CIRCUITRY OR "INVERTER DRIVER" THAT RAISES THE VOLTAGE FROM THE STORAGE UNITS INTO THE HIGHER VOLTAGE-MINIMUM AMPERAGE WHICH IS REQUIRED TO PRODUCE THE ELECTRO LUMINESCENCE EFFECT.